In the Claims

1. (Currently Amended) A MOS-type power component in which all of the active regions extend perpendicularly to a surface of a semiconductor chip substantially across an entire thickness thereof.

2. (Currently Amended) The component of claim 1, wherein ~~the~~ contacts with the active regions ~~to be connected~~ are taken by conductive fingers substantially crossing the entire active regions with which a contact is ~~desired to be~~ established.

3. (Currently Amended) The component of claim 1 [[2]], wherein the conductive fingers are metal fingers.

4. (Currently Amended) The component of claim 1, wherein [[the]] junctions or limits between regions are arranged in planes perpendicular to [[the]] a main chip surface[[s]].

5. (Currently Amended) The component of claim 1, wherein [[the]] junctions or limits between regions are formed of several cylinders perpendicular to [[the]] a main chip surface[[s]].

6. (Currently Amended) The MOS-type power ~~transistor~~ component of claim 1, alternately comprising a source region of a first conductivity type, an intermediary region, and a drain region of the first conductivity type, each of these regions extending across the entire thickness of [[the]] a substrate, the source and drain regions being contacted by conductive fingers or plates substantially crossing the substrate, insulated and spaced apart conductive fingers crossing from top to bottom the intermediary region, [[the]] a horizontal distance between the insulated fingers being such that the intermediary region can be inverted when an appropriate voltage is applied to these insulated fingers.

7. (Currently Amended) The MOS-type power ~~transistor~~ component of claim 6, wherein the conductive fingers ~~penetrating~~ penetrate into lightly-doped N-type regions and are surrounded with heavily-doped N-type regions.

8. (Currently Amended) [[An]] The MOS-type power component of claim 1 comprising an IGBT transistor ~~according to claim 1~~, ~~alternately~~ the IGBT transistor comprising a source region of a first conductivity type, an intermediary region, a drain region of the first conductivity type, and an additional region of the second conductivity type, each of these regions extending across [[the]] an entire substrate thickness, the source region and the additional region being contacted by conductive fingers or plates substantially crossing [[the]] a substrate, insulated and spaced apart conductive fingers crossing from top to bottom the intermediary region, [[the]] a horizontal region between the insulated fingers being such that the intermediary region can be inverted when an appropriate voltage is applied to these insulated fingers.

9. (Currently Amended) The MOS-type power component ~~or IGBT transistor~~ of claim 6, wherein each of the conductive fingers is respectively connected to a source metallization, to a gate metallization, [[and]] or to a drain metallization.

10. (Currently Amended) The MOS-type power component ~~or IGBT transistor~~ of claim 6, wherein localized metallizations extend vertically between the source region and the intermediary region to form localized short-circuits.

11. (Currently Amended) The MOS-type power component ~~or IGBT transistor~~ of claim 6, wherein the insulated and spaced apart conductive fingers are formed from conductive fingers crossing the entire thickness of the chip, the walls of which are oxidized and which are filled with doped polysilicon.

12. (Currently Amended) The MOS-type power component or IGBT transistor of claim 8, wherein each of the conductive fingers is respectively connected to a source metallization, to a

gate metallization, [[and]] or to a drain metallization.

13. (Currently Amended) The MOS-type power component or IGBT transistor of claim 8, wherein localized metallizations extend vertically between the source region and the intermediary region to form localized short-circuits.

14. (Currently Amended) The MOS-type power component or IGBT transistor of claim 8, wherein the insulated and spaced apart conductive fingers are formed from conductive fingers crossing the entire thickness of the chip, the walls of which are oxidized and which are filled with doped polysilicon.

15. (New) A MOS-type power component comprising:
a substrate;
active regions extending through the substrate; and
contacts extending through the substrate and contacting the active regions.

16. (New) The MOS-type power component of claim 15, wherein the contacts are metal fingers.

17. (New) The MOS-type power component of claim 15, wherein an interface between the active regions is arranged as a plane perpendicular to a surface of the substrate.

18. (New) The MOS-type power component of claim 15, wherein an interface between the active regions is arranged as a cylinder perpendicular to a surface of the substrate.

19. (New) The MOS-type power component of claim 15, further comprising:
a source region of a first conductivity type extending through the substrate;
an intermediary region extending through the substrate;
insulated conductive fingers extending through the intermediary region, a spacing

between the insulated conductive fingers being such that the conductivity of the intermediary region can be altered when a voltage is applied to the insulated conductive fingers; and

a drain region of the first conductivity type extending through the substrate, the source and drain regions being contacted by at least one of the contacts.

20. (New) The MOS-type power component of claim 19, wherein the contacts contact heavily-doped N-type regions.

21. (New) The MOS-type power component of claim 15, wherein the MOS-type power component is an IGBT transistor, the IGBT transistor comprising:

a source region of a first conductivity type extending through the substrate being contacted by at least one of the contacts;

an intermediary region extending through the substrate;

a drain region of the first conductivity type extending through the substrate;

an additional region of the second conductivity type extending through the substrate and being contacted by at least one of the contacts; and

insulated conductive fingers extending through the intermediary region, a spacing between the insulated conductive fingers being such that the conductivity of the intermediary region can be altered when a voltage is applied to the insulated conductive fingers.

22. (New) The MOS-type power component of claim 19, wherein each of the contacts is respectively connected to a source metallization, a gate metallization, or a drain metallization.

23. (New) The MOS-type power component of claim 19, wherein localized metallizations extend vertically between the source region and the intermediary region to form localized short-circuits.

24. (New) The MOS-type power component of claim 19, wherein the insulated conductive fingers are formed at least partially of polysilicon and are insulated by an oxide layer.

25. (New) The IGBT transistor of claim 21, wherein each of the contacts is respectively connected to a source metallization, to a gate metallization, or a drain metallization.

26. (New) The IGBT transistor of claim 21, wherein metallizations extend vertically between the source region and the intermediary region to form short-circuits.

27. (New) The IGBT transistor of claim 21, wherein the insulated conductive fingers are formed at least partially of polysilicon and are insulated by an oxide layer.

28. (New) The MOS-type power component of claim 15, wherein all of the active regions extend through the substrate.

29. (New) The MOS-type power component of claim 15, wherein all of the contacts which contact the active regions extend through the substrate.

30. (New) A MOS-type power component in which active regions extend perpendicularly to a surface of a semiconductor chip substantially across an entire thickness thereof, wherein contacts with the active regions are made by conductive fingers that substantially cross the entire thickness of the semiconductor chip.

31. (New) The component of claim 30, wherein the conductive fingers are metal fingers.

32. (New) The component of claim 30, wherein junctions or limits between regions are arranged in planes perpendicular to a main chip surface.

33. (New) The component of claim 30, wherein junctions or limits between regions are formed of several cylinders perpendicular to a main chip surface.

34. (New) The MOS-type power component of claim 30, further comprising:

a source region of a first conductivity type;

an intermediary region; and

a drain region of the first conductivity type, each of the source, intermediary and drain regions extending across the entire thickness of the semiconductor chip, the source and drain regions being contacted by conductive fingers or plates substantially crossing the substrate;

insulated and spaced apart conductive fingers crossing from top to bottom the intermediary region, a horizontal distance between the insulated fingers being such that the intermediary region can be inverted when a voltage is applied to these insulated conductive fingers.

35. (New) The MOS-type power component of claim 34, wherein the conductive fingers penetrate into lightly-doped N-type regions and are surrounded with heavily-doped N-type regions.

36. (New) The MOS-type power component of claim 30, wherein the MOS-type power component is an IGBT transistor, the IGBT transistor comprising:

a source region of a first conductivity type;

an intermediary region;

a drain region of the first conductivity type; and

an additional region of the second conductivity type, wherein each of the source, intermediary, drain and additional regions extend across an entire substrate thickness, the source region and the additional region being contacted by conductive fingers or plates substantially crossing a substrate; and

insulated and spaced apart conductive fingers crossing from top to bottom the intermediary region, a horizontal region between the insulated fingers being such that the intermediary region can be inverted when a voltage is applied to these insulated fingers.

37. (New) The MOS-type power component of claim 34, wherein each of the conductive fingers is respectively connected to a source metallization, to a gate metallization, or to a drain metallization.

38. (New) The MOS-type power component of claim 34, wherein localized metallizations extend vertically between the source region and the intermediary region to form localized short-circuits.

39. (New) The MOS-type power component of claim 34, wherein the insulated and spaced apart conductive fingers are formed in trenches in the semiconductor chip, the walls of which are oxidized and which are filled with doped polysilicon to form the conductive fingers.

40. (New) The IGBT transistor of claim 36, wherein each of the conductive fingers is respectively connected to a source metallization, to a gate metallization, or to a drain metallization.

41. (New) The IGBT transistor of claim 36, wherein localized metallizations extend vertically between the source region and the intermediary region to form localized short-circuits.

42. (New) The IGBT transistor of claim 36, wherein the insulated and spaced apart conductive fingers are formed in trenches in the semiconductor chip, the walls of which are oxidized and which are filled with doped polysilicon to form the conductive fingers.